SECTION 07 18 13
PEDESTRIAN TRAFFIC COATINGS

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies a surface applied neoprene and composition waterproofing type membrane suitable for light pedestrian traffic and recreation areas, but not intended for heavy industrial use.

1.2 RELATED WORK

A. Color and texture of finish coat: Section 09 06 00, SCHEDULE FOR FINISHES.

1.3 TEST AREA

Before start of general application, apply the elastomeric coating as specified in a representative test area. The area shall be approximately 9 m^2 (100 square feet). The area to be covered by the coating shall include all site conditions such as flashings bases, corners and projections through the coating. Location of test area shall be determined by the Resident Engineer, and after approval, shall serve as an example for the remaining work.

1.4 SUBMITTALS

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
B. Manufacturers Literature and Data: Each material, indicating compliance with specification requirements.
C. Samples: Each finish color on 100 by 200 mm (4 by 8 inch) substrate, layered to show each coat and finish.

1.5 WARRANTY

Warranty surfaces, where elastomeric coating has been applied, against leaks and other failures, over and above normal wear and failure of substrate, and subject to the terms of the "Warranty of Construction", FAR clause 52.246-21, except that the warranty period is two years.

1.6 DELIVERY AND STORAGE

A. Deliver materials to the site in original sealed containers, clearly marked with manufacturer's name and brand, and type of material.
B. Store materials in weathertight and dry storage facility. Protect from damage from handling, weather and construction operations before, during and after installation. Store materials at temperatures and under conditions recommended by the manufacturer.

1.7 ENVIRONMENTAL REQUIREMENTS

Do not proceed with application of materials when ambient temperature is less or greater than that recommended by the coating material manufacturer.

1.8 SAFETY REQUIREMENTS

Keep products away from heat, sparks and flame. Do not permit use of spark-producing equipment during application of flammable products or where explosive fumes are present.

PART 2 - PRODUCTS

2.1 MATERIALS

A. The trowel applied waterproof neoprene composition traffic bearing roof deck surfacing system shall be composed of a slip-sheet, waterproof membrane, traffic surfacing and finish coats, and shall conform to the following standards:
   1. Traffic deck binder and all rubber emulsions shall be compounded with neoprene liquid and shall have a minimum neoprene solids content of 35% when tested by the dry cup method.

2. Aggregate for traffic surface coating shall be suitably graded, fine trap-rock passing a #20 mesh sieve and retained on a #40 mesh sieve.
3. Slip-Sheet shall consist of an asphalt-saturated glass fiber matting weighing not less than 11 lbs. per 100 square feet and containing no rag or organic fibers.
4. Fabric used as reinforcement for waterproof flashing shall be 7-1/2 oz. woven polypropylene fabric.
5. Fabric used as reinforcement for waterproof membrane on horizontal surfaces shall be a minimum 1 oz. per square foot non-directional glass fiber matting.
6. Final Finish dressing shall be a single component, water-phase acrylic latex emulsion material, pigmented and of a consistency suitable for roller application.

2.2 PROPERTIES

A. Colors: Refer to Section 09 06 00, SCHEDULE FOR FINISHES.

B. Physical Properties:
Provide a waterproof deck covering system that meets or exceeds the listed minimum physical property requirements when tested according to the referenced standard test methods in parentheses.

Weight	2.5 lbs. per Sq.Ft.
Accelerated Weathering (ASTM G-23) (Atlas Twin-Arc Weatherometer)	No cracking, blistering, delamination, chalking, crazing or color change under 5X magnification
Cycles Wet/Dry 2000 hours	Dry: 145°F, 120 mins Wet: 60°F, 18 mins
Accelerated Aging (ASTM D-756) (Procedure D & E - 6 cycles)	No cracking, blistering, delamination, chalking, crazing or color change
Freeze-Thaw (ASTM C-97)	No breakage or weight loss < 1.0%
Abrasion (ASTM D-1242) (1,000 revolutions,1,000 gr. No. 80 TP Load aluminum oxide grit)	4.3% Thickness Reduction
Percolation (ICBO standard)	Complies to ICBO Test Method for this Standard
Water Absorption (ASTM D-570)	<6.09% No warping or cracking
Wind Uplift (ICBO Factory Mutual 1-52)	Qualifying Wind Velocity with Safety Factor of 3. Wind Velocity 131 MPH
Flammability (ASTM E-108, UL 790, NFPA 256)	
Intermittent Flame Exposer	Class A
Spread of Flame	Class A
Burning Brand	Class A
Chemical Resistance (ASTM D-2299)	
Industrial Detergent	No change in texture or color
Salt (20%)	No change in texture or color
Ammonia Solution (5%)	No change in texture or color
Muriatic Acid (10%)	No change in texture or color
Chlorine (10%)	No change in texture or color
Kerosene	No change in texture or color
Turpentine	Slight temporary softening of surface

Paint thinner	Slight temporary softening of surface

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

A. Surfaces to be coated shall be clean and dry. Smooth rough spots and tool marks.
B. Fill holes, depressions and cracks with fillers compatible with the coating material and recommended by the coating manufacturer.
C. Subsurface imperfections that telegraph through the finish coating surface will not be accepted.

3.2 WORK COORDINATION

A. To provide a watertight installation, coordinate this work with flashing and drains required to be installed before the coating work begins and be completed after the coating is in place.

3.3 APPLICATION

A. General: Apply each component of waterproof neoprene composition traffic bearing roof deck surfacing system according to manufacturer's directions to produce a uniform monolithic surface of thickness indicated.
B. Apply slip-sheet over properly prepared substrate. Overlap seams a minimum of 2 inches. Apply latex bonding coat when required.
C. Apply reinforced membrane at all vertical junctures. Embed polypropylene fabric into neoprene membrane liquid.
D. Apply aqueous neoprene rubber waterproof membrane solution with glass fabric reinforcement to entire area to be coated. Overlap all seams a minimum of 2 inches.
E. Trowel apply two coats of neoprene and aggregate composition traffic surfacing over all surfaces previously covered with waterproof membrane. Sand surface to remove trowel marks or small surface imperfections.
F. Trowel apply two smoothing coats of neoprene and fine aggregate composition to achieve smooth, filled surface. Sand to remove trowel marks or small surface imperfections.
G. Roller apply two coats of final finish dressing to a uniform finish.
H. Finished neoprene composition traffic-bearing roof deck surfacing shall be a nominal 3/16 inch thick, smooth and uniform in color and texture.

3.4 CURING, PROTECTION AND CLEANING

A. Cure waterproof neoprene composition traffic bearing roof deck surfacing materials according to manufacturer's directions, taking care to prevent contamination during application stages and before completing curing process. Close application area for a minimum of 24 hours.

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